

## General

### Title

Ambulatory care sensitive conditions: age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to the hospital, per 100,000 population under age 75 years.

### Source(s)

Canadian Institute for Health Information (CIHI). Health indicators 2010: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2010 May. 47 p.

## Measure Domain

### Primary Measure Domain

Population Health

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### Secondary Measure Domain

Access

## Brief Abstract

### Description

This measure is used to assess the age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to the hospital, per 100,000 population under age 75 years.

### Rationale

Hospitalization for an ambulatory care sensitive condition (ACSC) is considered to be a measure of access to appropriate primary health care. While not all admissions for these conditions are avoidable, it is assumed that appropriate ambulatory care could prevent the onset of this type of illness or condition,

control an acute episodic illness or condition, or manage a chronic disease or condition. A disproportionately high rate is presumed to reflect problems in obtaining access to appropriate primary care.

## Primary Clinical Component

Ambulatory care sensitive conditions (angina, asthma, chronic obstructive pulmonary disease [COPD], diabetes, grand mal status and other epileptic convulsions, heart failure and pulmonary edema, hypertension); hospitalization rate

## Denominator Description

Total mid-year population under age 75

## Numerator Description

Total number of acute care hospitalizations for ambulatory care sensitive conditions under age 75 years (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Evidence Supporting the Value of Monitoring the Aspect of Population Health

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Evidence Supporting Need for the Measure

### Need for the Measure

Monitoring and planning

Variation in health state(s)

### Evidence Supporting Need for the Measure

Canadian Institute for Health Information (CIHI). Health indicators 2010. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2010. 105 p.

## State of Use of the Measure

### State of Use

Current routine use

## Current Use

Federal health policymaking

Monitoring and planning

Monitoring health state(s)

National reporting

## Application of Measure in its Current Use

### Care Setting

Hospitals

### Professionals Responsible for Health Care

Physicians

### Lowest Level of Health Care Delivery Addressed

Regional

### Target Population Age

Age less than 75 years

### Target Population Gender

Either male or female

### Stratification by Vulnerable Populations

- Poverty populations
- Women

## Characteristics of the Primary Clinical Component

### Incidence/Prevalence

The age-standardized hospitalization rate for ambulatory care sensitive conditions in Canada decreased from 459 per 100, 000 in 2001-2002 to 320 per 100,000 in 2007-2008.

### Evidence for Incidence/Prevalence

## Association with Vulnerable Populations

Unspecified

## Burden of Illness

Unspecified

## Utilization

Unspecified

## Costs

Unspecified

# Institute of Medicine (IOM) Healthcare Quality Report Categories

## IOM Care Need

Staying Healthy

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding

Both users and nonusers of care

## Description of Case Finding

Mid-year population under age 75

## Denominator Sampling Frame

Geographically defined

## Denominator Inclusions/Exclusions

#### Inclusions

Total mid-year population under age 75

#### Exclusions

Unspecified

## Relationship of Denominator to Numerator

All cases in the denominator are not equally eligible to appear in the numerator

## Denominator (Index) Event

Does not apply to this measure

## Denominator Time Window

Time window is a single point in time

## Numerator Inclusions/Exclusions

#### Inclusions

Total number of acute care hospitalizations for ambulatory care sensitive conditions\* under age 75

\*Based on a list of conditions developed by Billings et al., any one most responsible diagnosis code of:

- Grand mal status and other epileptic convulsions
- Chronic obstructive pulmonary diseases
- Asthma
- Heart failure and pulmonary edema
- Hypertension
- Angina
- Diabetes

Note: Refer to the "Technical Note: Ambulatory Care Sensitive Conditions (ASCS)" document listed in the "Companion Documents" field for codes used.

#### Exclusions

- Individuals 75 years of age and older
- Death before discharge

## Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## Numerator Time Window

Institutionalization

## Data Source

Administrative data

## Level of Determination of Quality

Does not apply to this measure

## Type of Health State

Adverse Health State

## Pre-existing Instrument Used

Unspecified

## Computation of the Measure

### Scoring

Rate

### Interpretation of Score

A lower score is desirable

## Allowance for Patient Factors

Case-mix adjustment

## Description of Allowance for Patient Factors

Age-standardized rates are reported.

## Standard of Comparison

External comparison at a point in time

External comparison of time trends

Internal time comparison

## Evaluation of Measure Properties

### Extent of Measure Testing

Unspecified

## Identifying Information

Original Title

## Original Title

Ambulatory care sensitive conditions hospitalization rate.

## Measure Collection Name

Health Indicators 2010

## Submitter

Canadian Institute for Health Information - Nonprofit Organization

## Developer

Canadian Institute for Health Information - Nonprofit Organization

## Funding Source(s)

Canadian Government

## Composition of the Group that Developed the Measure

*Employees:* Canadian Institute for Health Information (CIHI) Health Indicators

## Financial Disclosures/Other Potential Conflicts of Interest

None

## Adaptation

Measure was adapted from another source.

## Parent Measure

Ambulatory Care Sensitive Conditions (ACSC) Hospitalization Rates [Billings J, Anderson GM, Newman LS. *Recent findings on preventable hospitalizations*. Health Affairs, 1996.]

## Release Date

2006 Jun

## Revision Date

2010 May

## Measure Status

This is the current release of the measure.

This measure updates a previous version: Canadian Institute for Health Information (CIHI). Health indicators 2008: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008 May. 39 p.

## Source(s)

Canadian Institute for Health Information (CIHI). Health indicators 2010: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2010 May. 47 p.

## Measure Availability

The individual measure, "Ambulatory Care Sensitive Conditions Hospitalization Rate," is published in "Health Indicators 2010: Definitions, Data Sources and Rationale." This document is available in Portable Document Format (PDF) from the [Canadian Institute for Health Information \(CIHI\) Web site](#) .

For more information, contact CIHI at, 4110 Yonge Street, Suite 300, Toronto, Ontario, Canada, M2P 2B7; Phone: 416-481-2002; Fax: 416-481-2950; E-mail: [indicators@cihi.ca](mailto:indicators@cihi.ca); Web site: <http://www.cihi.ca/cihiweb/> .

## Companion Documents

The following are available:

Canadian Institute for Health Information (CIHI). Health indicators 2010. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2010. 105 p. This document is available in Portable Document Format (PDF) from the [Canadian Institute for Health Information \(CIHI\) Web site](#) .

Canadian Institute for Health Information (CIHI). ICD-9/CCP, ICD-9-CM and ICD-10-CA/CCI codes for health indicators 2010. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2010. Various p. This document is available from the [CIHI Web site](#) .

Canadian Institute for Health Information (CIHI). Technical note: ambulatory care sensitive conditions (ACSC). [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2010 May 27 [accessed 2010 Aug 16]. [2 p]. This document is available from the [CIHI Web site](#) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on October 10, 2008. The information was verified by the measure developer on December 18, 2008. This NQMC summary was updated by ECRI Institute on April 19, 2010. The information was verified by the measure developer on June 24, 2010.

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